

## REVISIONS TO MATERIALS SAMPLING GUIDE July 1, 2019 Edition

Section 1 – General Instructions and Definitions			
General Definitions, Page 1-1			
Certificate of Compliance			
			Removed: Certificate of Compliance (COC): Manufacturer’s Certificate of Compliance shall state that the material or item meets all requirements defined for the project. Each COC will include all pertinent data (i.e. size, quantity, specification number, codes, contractor performing work, project number, project location, etc.) for the materials represented by the certificate. An authorized representative of the manufacturing firm will sign the certification.
Certificate of Tests			
			Removed: Certificate of Tests (COT): Manufacturer’s Certificate of Tests shall show the required test results and certify that they are correct. The project number, project location and contractor will be indicated on the COT. An authorized representative of the manufacturing firm will sign the COT. In some instances, such as steel for reinforcement, the process of manufacture must also be shown.
General Definitions			
			Removed: The cost of providing the COC, the COT and all expenses incurred regarding testing and sampling will not be paid for directly. This will be considered subsidiary to items for which the contract provides direct payment.
Instructions for Local Public Agency (LPA) Projects, Page 1-2			
			Removed: FALCON
			Added: OnBase
Technician Requirements			
			Removed: SiteManager
			Added: AASHTOWare Project (AWP)
Section 2 – Asphaltic Materials			
Materials 3) Performance Graded Binder, Page 2-2			
Field Personnel			
			Removed: SiteManager
			Added: AWP
Section 3 – Asphaltic Concrete			
Material 10 Asphaltic Concrete, Page 3-1			
Location of Additional Information			
			Removed: Note 28
Material 2) Asphaltic Concrete Type SPS, Page 3-1			
Location of Additional Information			

		Removed: Note 28
	Material 3) Asphaltic Concrete Types LC, RLC, SLX, SRM, Page 3-1	
	Location of Additional Information	
		Removed: Note 28
Section 4 – Asphaltic Concrete Materials		
	Material 1) Mineral Aggregate (Gravel, Sand, Sand-Gravel), Page 4-1	
	Location of Additional Information	
		Removed: Note 28
	Material 2) Crushed Rock (Limestone), Page 4-1	
	Location of Additional Information	
		Removed: Section 27, Note 28
		Added: -----
	Material 3) Crushed Rock (Limestone Screenings, Man-Sand), Page 4-1	
	Location of Additional Information	
		Removed: Section 27, Note 28
		Added: -----
	Material 4) Quartzite and Granite, Page 4-2	
	Location of Additional Information	
		Removed: Section 27, Note 28
		Added: -----
	Material 5) Quartzite, Chat and Granite (Screenings, Man-Sand), Page 4-2	
	Location of Additional Information	
		Removed: Section 27, Note 28
		Added: -----
	Material 6) Crushed Mineral Aggregate or Chat for Micro-surfacing, Page 4-2	
	Location of Additional Information	
		Removed: Note 28
Section 5 – Cold Mix Bituminous Surfacing and Base		
	Material 1) Subgrade Sand, Page 5-1	
	Location of Additional Information	
		Removed: Section 27, Note 28
		Added: -----
	Material 3) Combined Materials (Sand and Filler), Page 5-2	
	Location of Additional Information	
		Removed: Section 27, Note 28
		Added: -----

	Material 4) Bituminous Aggregates (Includes Mixed in Place Bituminous Surfacing), Page 5-2
	Location of Additional Information
	Removed: Note 28
	Material 5) Mineral Aggregates, Page 5-3
	Location of Additional Information
	Removed: Note 28
Section 6 – Gravel and Crushed Rock for Surfacing	
	Material 1) Gravel For Surfacing, Page 6-1
	Location of Additional Information
	Removed: Note 28
	Material 2) Crushed Rock for Surfacing, Page 6-2
	Location of Additional Information
	Removed: Note 28
Section 7 – Mineral Aggregate for Armor Coat	
	Material 1) Mineral Aggregate for Armor Coat (Gravel), Page 7-1
	Location of Additional Information
	Removed: Note 28
	Material 2) Chip Seal (Limestone, Dolomite, Granite, Quartzite), Page 7-2
	Location of Additional Information
	Removed: Note 28
Section 8 – Crushed Rock and Crushed Rock Screenings for Base Course	
	Material 2) Crushed Rock Screenings for Base Course, Page 8-1
	Location of Additional Information
	Removed: Section 27, Note 28
	Added: - - - - -
Section 13 – Granular Base, Granular Fill, Granular Backfill, Sand Blanket and MSE Walls	
	Material 1) All – Mineral Aggregates and Soil Binder, Page 13-1
	Location of Additional Information
	Removed: Section 27, Note 28
	Added: - - - - -
	Material 2) Mineral Aggregates (Commercial Production), Page 13-1
	Location of Additional Information
	Added: - - - - -
	Material 3) Coarse Sand, Page 13-2

		Location of Additional Information
		Removed: Note 28
Material 4) Fine Sand, Page 13-2		
		Location of Additional Information
		Removed: Note 28
Material 6) Granular Base, Granular Fill, Granular Backfill and Sand Blanket-Gradation, Page 13-5		
		Location of Additional Information
		Removed: Note 28
Material 7) Stabilized Portion of Granular Base, Granular Fill, Granular Backfill and Sand Blanket, Page 13-6		
		Location of Additional Information
		Removed: Section 27, Note 28
		Added: -----
Material 8) Granular Backfill for Structures, Page 13-7		
		Location of Additional Information
		Removed: Section 27, Note 28
		Added: -----
Material 9) Granular Subdrains, Page 13-8		
		Location of Additional Information
		Removed: Note 28
Material 10) Granular Backfill for Pipe Underdrain, Page 13-8		
		Location of Additional Information
		Removed: Note 28
Material 11) Select and Random Granular Backfill for MSE Walls, Page 13-9		
		Location of Additional Information
		Removed: Section 27, Note 28
		Added: -----
Section 14 – Portland Cement/Interground-Blended Cement/Silica Fume		
Material 1) Portland Cement, Page 14-1		
		Field Personnel
		Removed: Approved Products List
		Added: Nebraska Qualified Material Vendors List
Material 2) Inter-ground/Blended Cement, Page 14-1		
		Field Personnel
		Removed: Approved Products List
		Added: Nebraska Qualified Material Vendors List
Material 3) Silica Fume		
		Field Personnel

		Removed: Approved Products List
		Added: Nebraska Qualified Material Vendors List
Section 15 - Portland Cement Concrete For Pavement, Base Course, Base Course Widening, Pavement Patching, etc.		
	Material 1) Class E and F Aggregates, Page 15-1	
	Location of Additional Information	
	Removed: Note 28	
	Material 2) Class A, B, and C Aggregates, Page 15-1	
	Location of Additional Information	
	Removed: Note 28	
	Material 3) Class R Aggregate, Page 15-1	
	Location of Additional Information	
	Removed: Note 28	
	Material 4) All Aggregates, Page 15-2	
	Location of Additional Information	
	Removed: Note 28	
	Material 7a) Plastic Concrete (Non-QA/QC), Page 15-2	
	Material	
	Added: Non QA/QC	
	Material 7b) Plastic Concrete (QA/QC), Page 15-2	
	Material	
	Added: 7b) Plastic Concrete (QA/QC)	
	Type of Test	
	Added: Air Content	
	QC Sampling and Testing by Contractor	
	Added: First load and then one per 300 cubic yards	
	Field Personnel	
	Added: -----	
	Branch Lab	
	Added: -----	
	Central Lab	
	Added: -----	
	Location of Additional Information	
	Section 27, Note 1, Note 6	
	Type of Test	
	Added: Unit Weight	
	QC Sampling and Testing by Contractor	
	Added: First load and then one per 300 cubic yards in front of the paver. The concrete will be sampled behind the paver every half day.	

		Field Personnel	
			Added: Every half day of paving
		Branch Lab	
			Testing and sampling for verification testing and dispute resolution as needed.
		Central Lab	
			Added: -----
		Location of Additional Information	
			Section 27, Note 1, Note 6
		Nebraska Qualified Material Vendors List, Page 15-4	
			Added: Column for Nebraska Qualified Material Vendors List
Section 16 - Portland Cement Concrete For Structures, Culverts, and Miscellaneous Construction			
		Material 1) Class E and F Aggregates, Page 16-1	
		Location of Additional Information	
			Removed: Note 28
		Material 2) Class A, B, and C Aggregates, Page 16-1	
		Location of Additional Information	
			Removed: Note 28
		Material 3) Class R Aggregate, Page 16-1	
		Location of Additional Information	
			Removed: Note 28
		Material 5) All Aggregates, Page 16-2	
		Location of Additional Information	
			Removed: Note 28
		Material 10) Concrete Test Cylinders, Page 16-4	
		Field Personnel	
			Removed: For pours over 100 cubic yards, three sets of four 4x8 cylinders are required representative of each 1/3 day's production.
			Added: For bridge deck pours over 100 cubic yards, three sets of four 4x8 cylinders are required representative for each 1/3 day's production. For other structures over 100 cubic yards, two sets of four 4X8 cylinders are required.
		Nebraska Qualified Material Vendors List, Page 16-4	
			Added: Column for Nebraska Qualified Material Vendors List
Section 17 – Guardrail			
		Nebraska Qualified Material Vendors List, Page 17-1	
			Added: Column for Nebraska Qualified Material Vendors List
		Item 1) Cable and Beam Guardrail Assemblies, Page 17-1	
		Item or Group	

		Removed: Beam Guardrail
		Added: Cable and Beam Guardrail Assemblies
		Sample Required
		Removed: - - - - -
		Added: Yes – At least one sample of each of the items used in the guardrail assembly unless shipped from tested and approved stock. Sample will be returned
		Manufacturer Certified Tests Required
		Added: Yes
		Location of Additional Information
		Added: Section 27, Note 1, Note 10
	Item 1A) Beam Element, Page 17-1	
		Removed: Item 1A) Beam Element
	Item 1B) Steel Posts, End Posts, Special Posts, Adaptor Plates, Page 17-1	
		Removed: Item 1B) Steel Posts, End Posts, Special Posts, Adaptor Plates
	Item 2) End Anchor Assembly and Breakaway Terminal Section, Page 17-1	
		Sample Required
		Removed: Yes – At least one sample of each the items used in the guard rail assembly unless shipped from tested and approved stock. Sample will be returned
	Item 3) Miscellaneous Hardware Bolts, Washers, etc., page 17-1	
		Sample Required
		Removed: Yes – At least one sample of each the items used in the guard rail assembly unless shipped from tested and approved stock.
	Item 4) Wood Guardrail Posts and Blocks, page 17-1	
		Manufacturer Certified Tests Required
		Removed: See Note
		Added: Yes
		Manufacturer Certification of Compliance Required
		Removed: See Note
		Added: Yes
	Item F) Insert Assembly, Page 17-1	
		Removed: Item F) Insert Assembly
	Item 2) Cable Guardrail, Page 17-1	
		Removed: Item 2) Cable Guardrail
	Item 2A) Cable, Page 17-1	
		Removed: Item 2A) Cable
	Item 2B) Posts and Hook Bolts, Page 17-1	
		Removed: Item 2B) Posts and Hook Bolts
	Item 2C) Tension Spring Assemblies, Page 17-1	
		Removed: Item 2C) Tension Spring Assemblies

	Item 2D) Anchor Assemblies, Page 17-1		
			Removed: Item 2D) Anchor Assemblies
	Item 5) Guardrail End Treatment, Type I and II, Page 17-1		
			Added: Item 5) Guardrail End Treatment, Type I and II
			Sample Required
			Added: No – Unless requested by Materials & Research Division
			Approved Products List
			Added: No
			Nebraska Qualified Material Vendors List
			Added: No
			Manufacturer Certified Tests Required
			Added: No
			Manufacturer Certification of Compliance Required
			Added: Yes
			Location of Additional Information
			Added: Section 27, Note 10
Section 18, Fence, Handrail, and Barrier Rail Materials			
			Nebraska Qualified Material Vendors List, Page 18-1
			Added: Column for Nebraska Qualified Material Vendors List
Section 19 – Culvert Pipe, Drain Tile, Sewer Pipe, Slope Drains and Related Materials			
			Nebraska Qualified Material Vendors List, Page 19-1
			Added: Column for Nebraska Qualified Material Vendors List
	Item 1Ba) Culvert Pipe (All Shapes), Page 19-1		
			Nebraska Qualified Material Vendors List
			Added: Yes
	Item 1Bb) Flared End Sections, Page 19-1		
			Nebraska Qualified Material Vendors List
			Added: Yes
	Item 2A) Drain Tile Concrete, Page 19-1		
			Nebraska Qualified Material Vendors List
			Added: Yes
	Item 3B) Sewer Pipe Reinforced Concrete, Page 19-2		
			Nebraska Qualified Material Vendors List
			Added: Yes

Section 20 – Bridge Materials		
		Nebraska Qualified Material Vendors List, Page 20-1
		Added: Column for Nebraska Qualified Material Vendors List
	Item 26) Prestressed Fine and Coarse Aggregate, Page 20-4	
		Sample Required
		Removed: every 500 cubic yard of concrete
		Added: for quality tests
		Nebraska Qualified Material Vendors List
		Added: Yes
Section: 21 – Lighting and Signal Materials		
		Nebraska Qualified Material Vendors List, Page 21-1
		Added: Column for Nebraska Qualified Material Vendors List
	Item 2Ca-e) Electrical Items Conduit Aluminum, etc., Page 21-1	
		Sample Required
		Removed: SiteManager
		Added: AWP
	Item 2le) Electrical Items Electrical Equipment Luminaires, Page 21-3	
		Nebraska Qualified Material Vendors List
		Added: Yes
Section 22, Signing Materials		
		Nebraska Qualified Material Vendors List, Page 22-1
		Added: Column for Nebraska Qualified Material Vendors List
Section 23 – Traffic Control		
		Nebraska Qualified Material Vendors List, Page 23-1
		Added: Column for Nebraska Qualified Material Vendors List
	Item 1) Barricade Warning Sign, Drum, and Tubular Post Reflective Material, Page 23-1	
		Sample Required
		Removed: SiteManager
		Added: AWP
	Item 12) Permanent Pavement Marking, Type Paint, Page 23-2	
		Nebraska Qualified Material Vendors List
		Added: Yes
		Manufacturer Certification of Compliance Required
		Removed: When the pay quantity is less than 5,000 linear feet
	Item 13) Glass Beads for Permanent Pavement Marking Type Paint, Page 23-2	

		Nebraska Qualified Material Vendors List
		Added: Yes
		Manufacturer Certification of Compliance Required
		Removed: When the pay quantity is less than 5,000 linear feet
Section 24 – Roadside Development and Erosion Control		
		Nebraska Qualified Material Vendors List, Page 24-1
		Added: Column for Nebraska Qualified Material Vendors List
Section 25 – Miscellaneous Materials		
		Nebraska Qualified Material Vendors List, Page 25-1
		Added: Column for Nebraska Qualified Material Vendors List
		Material 21) Culvert Sandfill, Page 25-4
		Location of Additional Information
		Removed: Note 28
Section 27, Notes		
		Note 1, Sampling and Testing Small Quantities of Non-critical Materials, Page 27-1
		Removed: SiteManager
		Added: AWP
		Removed: SiteManager
		Added: AWP
		Note 9, Reinforcing Steel, Bars, and Fabric, Page 27-4
		Removed: SiteManager
		Added: AWP
		Removed: SiteManager
		Added: AWP
		Note 10, Beam and Cable Guardrail and Fittings, Page 27-4
		Removed: SiteManager
		Added: AWP
		Note 11, Metal Culvert Pipe Field Inspection and Reporting, Page 27-5
		Removed: SiteManager
		Added: AWP
		Note 12, Bolts, Nuts and Washers, and Structural Fasteners, Page 27-5
		Removed: SiteManager
		Added: AWP
		Note 14, Steel Bearing Piling, Steel Sheet Piling and Steel Shells for Cast-in-Place Piling, Page 27-5

			Removed: SiteManager
			Added: AWP
	Note 15, Combination Mast Arm Signal and Lighting Poles, Mast Arm Signal Poles, Span Wire Poles, Pedestal Traffic Signal Poles and Light Poles, Page 27-6		
			Removed: SiteManager
			Added: AWP
	Note 18, Gray Iron Castings (Cast Iron Grates, Frames, Pull Box Frames and Covers, Junction Boxes, etc.), Page 27-6		
			Removed: SiteManager
			Added: AWP
	Note 22, Reflectors and Fasteners, Page 27-7		
			Removed: SiteManager
			Added: AWP
			Removed: SiteManager
			Added: AWP
	Note 23, Delineator Posts, Page 27-7		
			Removed: SiteManager
			Added: AWP
	Note 25, Treated and Untreated Timber Piling, Treated Timber Sheet Piling, Fence Posts, Treated and Untreated Lumber, Treated and Untreated Timber, Wood Guardrail Posts, Offset Blocks, Treated Poles and Sign Posts, Page 27-8		
			Removed: of inspection and treatment
			Added: tests
			Removed: of inspection and treatment
			Added: tests
			Removed: SiteManager
			Added: AWP
	Note 26, Rock Riprap and Gabion Stone Fill, Page 27-8		
			Removed: The sampling of rock riprap and gabion stone fill is not required if the material is received from any of the following sources: Concrete Materials Company (Sioux Falls, SD) Fisher Sand & Gravel (Mitchell, SD) Martin Marietta Materials (Ft Calhoun, NE) Martin Marietta Materials (Guernsey, WY) Hills Materials Company (Hot Springs, SD) Kerford Limestone (Weeping Water, NE) L. G. Everst (Del Rapids, SD) Martin Marietta Materials (Weeping Water, NE) Martin Marietta Materials (Granite Canyon, WY) Spencer Quarry (Spencer, SD) Since

	Note 28, Nebraska Qualified Materials Vendor List, Page 27-9	
		Removed: Note 28
Section 28, Quality Assurance Program for Construction		
Section 3, Acceptance Program		
	3.1 General, Page 28-3-1	
		<p>Added:</p> <p>Material acceptance is defined by these categories:</p> <ul style="list-style-type: none"> <li>• Visual Verification</li> <li>• Approved Products List</li> <li>• Note* These acceptance methods will not be paired with other acceptance methods. Once recorded, no additional documentation is required.</li> </ul> <ul style="list-style-type: none"> <li>• Certificate of Compliance</li> <li>• Certificate of Tests</li> <li>• Sample and Test</li> <li>• Note* These acceptance methods may be paired with one or more other acceptance methods and require further action or record compliance.</li> </ul> <ul style="list-style-type: none"> <li>• Nebraska Qualified Material Vendors List</li> <li>• Note* This acceptance method must be paired with another acceptance method.</li> </ul>
	3.2.2 Manufactured Materials, Page 28-3-2	
		<p>Added: Certificate of Compliance – The Certificate of Compliance shall state that the material or item meets all requirements defined for the project. Each COC will include all pertinent data ((i.e. size, quantity, specification number, codes, con-tractor performing work, project number, project location, etc.) for the materials represented by the certificate. The COC shall be signed by the manufacturer’s authorized representative and indicate the representative’s job title.</p> <p>Certificate of Tests – Manufacturer’s Certificate of Tests shall show the required test results and certify they are correct. In some instances, such as steel for reinforcement, the process of manufacture must also be shown. The COT shall be signed by the manufacturer’s authorized representative and indicate the representative’s job title.</p> <p>The cost of providing the COC the COT and all expenses incurred regarding testing and sampling will not be paid for directly. This will be considered subsidiary to items for which the contract provides direct payment.</p>
	3.2.4 Nebraska Qualified Material Vendor List, Page 28-3-2	
		<p>Added: 3.2.4 Nebraska Qualified Material Vendor List – NDOT will pre-qualify material vendors to supply specific materials based on specification as outlined in the Standard Specification for Highway Construction and con-tract. In addition to these qualifications, additional material acceptance documentation is required for the materials provided by these vendors.</p>

			The NQMVL is maintained by the Materials & Research Division. The NQMVL is subject to change at the discretion of the Nebraska Department of Transportation.
			A4.2.1 Newly hired and temporary project inspection staff, Page 28-A-2
			Removed: sight and sound
			Added: direct communication access
Appendix A, Sampling and Testing Personnel Qualification Program			
			A5.1 Documentation, Page 28-A-2
			Removed: SiteManager
			Added: AWP
Table A1, Test Methods for Qualification of Sampling and Testing Personnel			
			ACI Concrete Strength Testing Technician, Page 28-A-5
			Removed: SiteManager
			Added: AWP
			Maturity Curve Method of Development, Page 28-A-5
			Removed: SiteManager
			Added: AWP
			ACI Concrete Field Testing Technician, Page 28-A-6
			Removed: SiteManager
			Added: AWP
			Concrete Plant Technician, Page 28-A-6
			Removed: SiteManager
			Added: AWP
			Concrete Field Inspector/General Handling of Concrete, Page 28-A-7
			Removed: SiteManager
			Added: AWP
			Maturity Method Field Monitoring, Page 28-A-7
			Removed: SiteManager
			Added: AWP
			Profilograph Operator, Page 28-A-8
			Removed: SiteManager
			Added: AWP
			Portland Cement Sampler, Page 28-A-8
			Removed: SiteManager
			Added: AWP
			Earthwork Technician II, Page 28-A-9
			Removed: SiteManager
			Added: AWP
			Earthwork Technician I, Page 28-A-9
			Removed: SiteManager

		Added: AWP
		Asphalt Concrete Technician, Page 28-A-10
		Removed: SiteManager
		Added: AWP
		PG Binder/Emulsion Sample Technician, Page 28-A-11
		Removed: SiteManager
		Added: AWP
		Asphaltic Field Technician I, Page 28-A-11
		Removed: SiteManager
		Added: AWP
		Asphaltic Field Technician II, Page 28-A-11
		Removed: SiteManager
		Added: AWP
		Concrete Field Inspector/General Handling of Concrete Provisional Certification, Page 28-A-12
		Removed: SiteManager
		Added: AWP
		Soil/Aggregate Technician Provisional Certification, Page 28-A-12
		Removed: SiteManager
		Added: AWP
		Asphaltic Technician Provisional Certification, Page 28-A-12
		Removed: SiteManager
		Added: AWP
		Asphaltic Concrete Technician Provisional Certification. Page 28-A-13
		Removed: SiteManager
		Added: AWP
		Policy 1, Precast/Prestressed Concrete Plant Inspection – NDOT Inspector
		Materials and Research Inspectors, Page 29-3
		Removed: SiteManager
		Policy 4, Portland Cement and Intergrated/Blended Cements
		Certified Mill Analysis, Page 29-9
		Removed: Approved Products List
		Added: Nebraska Qualified Material Vendors List
		Removed: Approved Products List
		Added: Nebraska Qualified Material Vendors List
		Removed: APL
		Added: NQMVL

		Option 1, Page 29-9
		Removed: The 10-pound sample will be tested at the NDOT central laboratory.
		Added: for Portland cement or fifteen pound sample for IP, IS or IT. The sample will be tested at the NDOT central laboratory
		Option 1, 2, B, iii, Page 29-9
		Removed: at 28 days
		Added: or AASHTO T380
		Sampling From Bulk Shipment Railroad Car, Truck, or Batch Plant Silo, Page 29-11
		Removed: NDOR
		Added: NDOT
		Quality Control of Portland Cement, Page 29-11
		Removed: Quality Control of Portland Cement table
		Added: Quality Control of Portland Cement table
		Quality Assurance of Interground/Blended Cement, Page 29-12
		Removed: Quality Assurance of Interground/Blended Cement
		Added: Quality Assurance of Interground/Blended Cement
Policy 7, Policy for Certification of Ready Mix Plants		
		National Ready Mixed Concrete Association Plant Certification
		Removed: SiteManager
		Added: AWP
Policy 9, Policy Concerning Concrete and Precast Pipe Plant Certification Including Testing, Inspection and Approval of Reinforced Concrete Culvert and Sewer Pipe and Concrete Flared-End Sections		
		General, Page 29-21
		Removed: APL
		Added: NQMVL
		Disqualification of a Concrete Pipe/Precast Manufacturer, Page 29-22
		Removed: APL
		Added: NQMVL